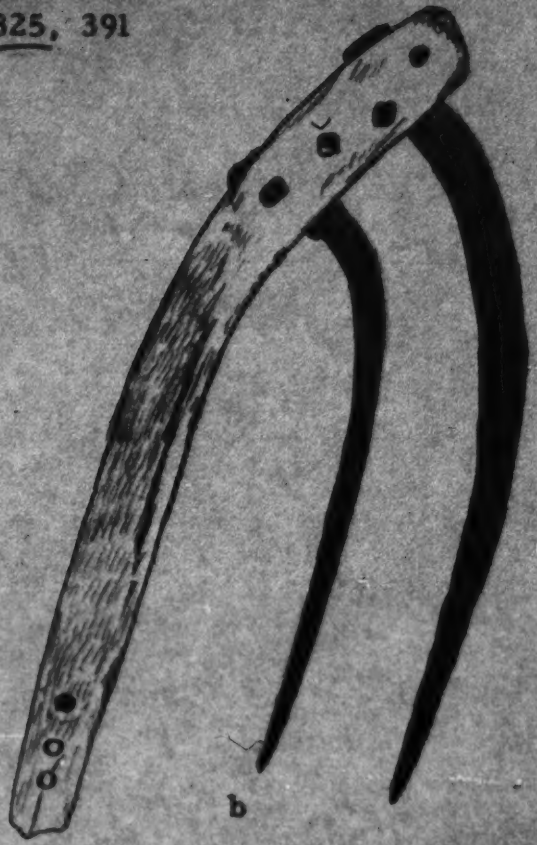
2: Stefansson--251 (1908-12) 1914 Copper Eskimo
325, 177, 117

"Use of Copper. Copper is said to abound near Dismal Lake. I bought a copper snow knife this morning and saw a piece of copper, both said to have been brought from there, the piece by Iglĭx'ĭrk, whom Hanbury saw. The copper piece was rudely triangular about five by seven by nine inches and about half an inch thick. It had been partly melted either to break it from its native bed or to break it from a larger piece."

8: Cadzow--8
116, 325, 391

(1919) 1920

Copper Eskimo



b

a

Plate 1--GAFF-HOOK AND FLOAT COPPER
a, Mass of float copper from which a piece has been cut. b, Gaff-hook with copper prongs

8: Cadzow--8-10 (1919) 1920 Copper Eskimo
116, 325, 391

"Following is a description [9] of the more noteworthy objects gathered during the trip.

Gaff-hook.--The manufacture and use of the copper-pronged gaff-hook represented in pl. I was described as follows: First, a rough prong is hammered out of a small mass of float copper (a) with a beach pebble held in the hand. Next it is smoothed and finished by rubbing against a large bowlder. A piece of caribou antler is shaped into a head (b), holes are cut through it, and each prong is attached by passing one end through a hole and hammering it to a flat rivet-head. The prongs are then securely wedged in place with small pieces of copper. The hooks are not of uniform size, but vary according to the fancy of the maker or to the material at hand. Copper rivets are sometimes used to strengthen the hooks by driving them through the head and flattening the ends. The head is beveled where it is fastened to the wooden shaft, and is held in place with copper pegs, the junction being securely wrapped with strips of raw sealskin. The shaft, which is from 15 ft. to 20 ft. in length and about 1 1/2 in. in diameter, is [10] preferably made of dry and seasoned spruce. Owing to the difficulty in securing material for the shaft, three or four pieces of wood are often spliced together to attain the desired length."

15: Jenness--540 (No date) 1923 Copper Eskimo
116, 325

"America, too, has had its transitional period, in some places a true metal age marked by the smelting of copper and of tin, in others only a pseudo-metal period, copper being treated simply as a malleable stone. The Eskimos inhabiting the regions around Coronation Gulf were in this pseudo-metal stage. Pure native copper is found there in three places; at the head of Prince Albert Sound on Victoria Island, in the Copper Mountains west of the Coppermine River near its mouth, and on the islands in Bathurst Inlet. Copper obtained from all these sources was hammered into tools and weapons by the Eskimos, but most of their supply seems to have come from the Copper Mountains. Among the Eskimos of northern Greenland there was also a pseudo-metal period marked by the use of meteoric (and possibly telluric) iron instead of copper; but this use of iron never extended outside of Greenland and so does not come within the scope of this paper, which is concerned only with the Central Eskimos and their copper."

15: Jenness--547-548 (No date) 1923 Copper Eskimo
116, 174, 325

"ORIGIN OF THE COPPER CULTURE

Now that we have reached the conclusion that the present Copper Eskimos represent, for the most part at least, an immigrant people from the eastward, a second problem comes up for our consideration. Copper was extensively used in this northern area both by Indians and Eskimos. Did each group acquire its knowledge independently; or did one of them, and which one, learn the use of copper from the other?

Let us examine first the evidence from Eskimo sources. A full copper culture--a culture, that is, where copper replaces stone in all the cutting implements--appears only in the region around Coronation Gulf, where there are large deposits of free native copper. The metal was well known to the Eskimos on the shores of Hudson Bay during the last two to three centuries, but from their own statements it is clear that they obtained their supply from Coronation Gulf. Copper has not been found to my knowledge in the older ruins of northern Alaska and the Mackenzie delta. A little drifted in at a later date; but this, like the soapstone lamps and pots, was derived from trade with the Copper Eskimos. At first sight, therefore, it would appear that the only knowledge of copper the Eskimos possessed came from the deposits in the Coronation Gulf area. Now the old wood and sod houses in this region, which are probably not more than five or six hundred years old, reveal a stone-age culture; copper either does not appear at all or is found in very sparing quantities. Consequently the copper culture among the Eskimos must be of comparatively recent growth, so recent indeed that it did not have

time to spread far from its home before Europeans appeared on the scene.

We can glean a little more information on the subject from the journal of Samuel Hearne, who made a journey to the mouth of the Coppermine River with a band of Chipewyan Indians in 1771. At Bloody Fall, near the mouth of the Coppermine, his Indians murdered five Eskimo families. Hearne's description of the tools and weapons these Eskimos possessed shows that, with one exception, they did not differ from those in use up to the beginning of the present century. This one exception, however, is all-important. He says: 'Their arrows are either shod with a triangular piece of black stone, like slate, or a piece of copper; but most commonly the former.' (4) Now a century later the use of slate for arrowheads, or for any tools or wea- [548] pons, had virtually ceased. No mention is made of it by the explorers of the nineteenth century, although they frequently mention copper arrowheads. One arrowhead tipped with stone (slate?) was obtained by Mr. Stefansson in 1911--the only one, I believe, that has been reported since the days of Hearne. Slate points are still found occasionally on the surface of the ground, but the use of them in 1914 was traditional only, and the method

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"4. Samuel Hearne: A Journey from Prince of Wales's Fort in Hudson's Bay to the Northern Ocean in the Years 1769, 1770, 1771, and 1772, new edit., edited by J. B. Tyrrell, The Champlain Society, Toronto, 1911, p. 189."

of manufacture was not clearly remembered. It would seem therefore that the Copper Eskimos had passed out of the stone age not so very long before Hearne's day, since they still retained the use of slate in at least one of their weapons, and that a very important one.

The linguistic evidence might seem to run counter to this conclusion. The Eskimos have almost exactly the same word for copper from Greenland to northern Alaska, and even in northeastern Asia. In Greenland it is kangnusak, kangusak, or kannussaq (according to dialect); from Labrador to northern Alaska it is kannuyaq; and in northeastern Asia it is given as kaniuyak. There are some obscure features about this word which I do not understand, but the changes that it has undergone in Greenland would indicate that it was present in the eastern dialects before the great Eskimo migrations to Greenland between the eleventh and the fourteenth centuries. But the fact of the Eskimos having a word for copper before 1000 A. D. would not signify a copper culture or that they knew of copper deposits and the art of hammering out the metal. It cannot therefore vitiate the argument that a real knowledge of copper was acquired by the Eskimos only four or five hundred years ago, when it arose in the region around Coronation Gulf.

15: Jenness--548-549 (No date) 1923 Copper Eskimo
116, 174, 325

"THE USE OF COPPER AMONG THE NORTHERN INDIANS

Let us turn now to the evidence on the Indian side. We know that a knowledge of copper was widespread among the Indians in very early times. The deposits around Lake Superior, for example, were worked before the Europeans settled in America. In the north the Yellow-knife Indians of Great Bear and Great Slave Lakes received their name from the extensive use they made of this metal, and from Hearne's testimony we gather that it was not a recent acquisition among them. I may quote his words in extenso:

'Before Churchill River was settled by the Hudson's Bay Company, which was not more than fifty years previous to this journey being undertaken [i.e. after 1721] the Northern Indians [Chipewyans] had no other metal but copper among them, except a small quantity of iron-work, which a party of them who visited York Fort about the year one thousand seven hundred and thirteen, or one thousand seven hundred and fourteen, purchased; and a few pieces of old iron found at Churchill River, which had undoubtedly been left there by Captain Monk. This being the case, numbers of them from all quarters used every Summer to resort to these hills [the Copper Mountains near the Coppermine River[in search of copper; of which [549] they made hatchets, ice-chissels,] bayonets, knives, awls, arrowheads, &c. The many paths that had been beaten by the Indians on these occasions, and which are yet, in many places, very perfect, especially

on the dry ridges and hills, is surprising; in the vallies and marshy grounds, however, they are mostly grown over with herbage, so as not to be discerned.

'The Copper Indians [Yellow-knives] set a great value on their native metal even to this day; and prefer it to iron, for almost every use except that of a hatchet, a knife, and an awl: for these three necessary implements, copper makes but a very poor substitute. When they exchange copper for iron-work with our trading Northern Indians, which is but seldom, the standard is an ice-chissel of copper for an ice-chissel of iron. . . .' (5)

We should not take too seriously Hearne's remarks about the tracks worn by the Indians on their visits to the Copper Mountains. Probably they were nothing but the trails of caribou or musk oxen, which often travel along well-defined paths. But his statement does prove that the northern Indians, including the Yellow-knives, Dog-ribs, and Chipewyans, had a full-fledged copper culture in the seventeenth century, when the Eskimos to the north of them seem not to have fully emerged from the stone age. Moreover, from numerous passages in his journal it is clear that the two races frequently came into contact with each other at this period, and even though such contact may always have meant hostilities, this would not prevent a knowledge of copper from passing from one to the other. We learn also that, although the lower reaches of the Coppermine River were very remote from the usual hunting grounds of the Chipewyan Indians who visited Fort Churchill, so well known was the route that these Indians did

not hesitate to make the long and arduous journey of nearly a thousand miles in order to obtain their own supply of copper from the 'mines,' rather than to rely on their trade with the Yellow-knives. Hearne gives the Chipewyan legend concerning the discovery of these mines, and a slightly different version of the same legend was obtained fifty years later by Sir John Franklin. Although too long to quote here in full, it has an important bearing on our inquiry inasmuch as it ascribes the discovery of these copper deposits near the Coppermine River not to an outside people but to the Chipewyans themselves and implies that they were acquainted with the metal even before this discovery. We cannot tell how long it would take for such a myth to arise, but it certainly does not favor any recent introduction of copper from an outside source."

28: Jenness E-5 (1914-1916) 1946
ND8 Copper Eskimo ND8

[P. 1]

MATERIAL CULTURE OF THE COPPER ESKIMO

INTRODUCTION

In 1914, when the Canadian Arctic Expedition established its headquarters at Bernard Harbour in Dolphin and Union Strait, on the western fringe of Copper Eskimo territory, the natives preserved their old culture, virtually unimpaired, despite contact with several explorers in the middle of the nineteenth century, and with others during the early years of the twentieth. The only visible change caused by these contacts was the introduction of a considerable quantity of iron, which the Eskimo hammered cold, as they hammered their native copper, and had already substituted for copper in knives, adzes, harpoon heads, and needles. From lack of ammunition the only men who possessed rifles, five in number, had fallen back on the bow and arrow, which was still the universal weapon of the chase. Of the arrows not tipped with bone about two-thirds bore tips of hammered copper and only one-third tips of iron; the ice chisel and other tools retained their copper blades and points; and the soapstone pot for cooking meat held undisputed sway in every household. All clothing was of skin or fur, mainly from the caribou and the seal; and in cut and adornment it followed without change the styles set by earlier generations. The blubber of the seal, burned in a soapstone lamp, provided the only artificial light, and throughout the winter months all the energies of the Eskimo were concentrated on the pursuit of seals at their breathing holes in the sea ice.

Ten years later the situation had undergone a profound change. Native copper had become practically valueless and served for rivets only. Bows and arrows had disappeared, because every native was now armed with a high-powered rifle. Other weapons and tools had steel or iron blades, metal cooking pots had ousted the soapstone vessels, and primus lamps and kerosene lanterns were spreading from home to home. Fur clothing was tending to follow western Eskimo patterns, and to be overlaid with bead-work, or with imported garments of cotton or wool. Dissatisfied with the old-fashioned snow-hut and skin-covered kayak, one native had even erected a plank cabin heated by an iron stove, and purchased a motor-boat to transport his household goods along the coast during the brief summer months. The tentacles of the fur trade had firmly gripped the region, and the trapping of foxes, animals of no economic importance in earlier times, now rivalled in importance the hunting of seals and caribou.

Fortunately, before this revolution occurred, the Canadian Arctic Expedition had brought out a large collection of Copper Eskimo specimens, nearly all of which are now stored in the National Museum at Ottawa. These specimens, and

CHAPTER I

MATERIAL RESOURCES

Few people have been called upon to sustain life and perpetuate their race on such meagre resources as the Copper Eskimo. Even if they had been acquainted with agriculture the climate debarred it, just as it debarred the growth of trees except in two or three sheltered valleys along the southern fringe of their territory. It restricted not only the flora but the fauna, leaving the natives dependent for their food and for much of their equipment on one land animal, the seasonally migrating caribou, and two sea mammals, the foetid and the bearded seals, supplemented by such fish as they could capture in rivers, lakes, and bays. Ignorant of all metals except their native copper, which seemed to them only a malleable stone, and cut off from contact with any but neighbouring tribes, little or no more advanced than themselves, they had to build up their lives on the scanty resources provided by their own narrow environment, and rely on their own ingenuity to supply all their needs.

The resources provided by their environment fall naturally into four groups:

Wood
Stone (including native copper and other minerals)
Bone, antler, horn, ivory
Hides and sinew.

WOOD

The Copper Eskimo obtained their wood from two sources. First, there was the driftwood, mainly spruce and cottonwood, carried to the ocean by Mackenzie River far to the westward and borne by the winds and currents to Dolphin and Union Strait and western bays of Victoria Island. Then in the valleys of three rivers that flowed into Coronation Gulf, Coppermine, Napaktauktauk, and Tree, there stood scattered groves of spruce, small and stunted, a few miles from the coast, but larger as one proceeded south. Far to the southeast, too, near Thelon River, were other stands of spruce that the Eskimo from Bathurst Inlet and from the eastern shores of Victoria Island occasionally visited in their wanderings. Thus the Copper Eskimo had abundant wood to satisfy all their needs; but as driftwood was very scarce in many districts, and the standing timber on the southern fringe of their territory could be reached only after a long journey overland, which many natives were disinclined to make, manufactured objects of wood were among the commonest articles of trade and passed freely from one end of the territory to the other. Moreover, so crude were the Eskimo tools, and so great the labour of cutting down the trees and hewing the timber into shape, that any object of moderate size, such as a sled-runner, a table, or even a tent-pole, commanded a high price.[1]

The principal tools used in working wood were the adze and the whittling knife (*See* pp. 100 and 103). Bone or antler wedges, generally made for each occasion and immediately discarded, served to split small logs and planks; they were driven home with boulders. Lacking saws, the Eskimo shortened a plank in one or other of three ways: they hacked it with the adze; gouged it across with the grooving tool (*See* p. 100); or they drilled a line of holes across it with the bow drill.

[1] Cf. Stefansson, V.: The Stefansson-Anderson Arctic Expedition: Arch. Papers, Amer. Mus. of Nat. Hist., vol. XIV, pt. I, pp. [illegible] New York, [illegible].

28: Jennese E-5 (1914-1916) 1946
ND8 Copper Eskimo ND8

fingernail, so that the labour of manufacturing even a large vessel was comparatively slight, never requiring more than a few days. We saw no pots made of any other material, but from Prince Albert Sound we obtained two lamps, one fashioned from a red sandstone, the other from an igneous rock, that could hardly have been hollowed out with adzes in the ordinary way, but must have been shaped by some pecking and grinding process. Their owners knew nothing about their manufacture, and there is good reason to believe that they were not made by the Copper Eskimo, but came in from Hudson Bay.[1]

As stated in the introduction, the natives considered their amygdaloidal copper,[2] which took the place of stone, bone, or ivory in so many of their implements, as merely a peculiar stone that they could work into shape, cold, by hammering with boulders and pebbles (Figure 1). Whether they were able to drill copper before they obtained iron is uncertain; if so, they must have used stone- or copper-pointed drills. In our time they still retained one or two of these copper-pointed drills, but used them, so far as we observed, only on bone, antler, and wood.

Figure 2. Lump of galena, used for marking skins. IV.D.388. 1/1.

The only important mineral besides copper was iron pyrites, which the Eskimo gathered mainly in the beds of two streams, Kugaluk River in the southwest of Victoria Island and a creek a few miles east of Coppermine River. There were other sources, however, that I failed to record. This mineral served the natives instead of flint and steel for striking fire. They possessed also a few fragments of galena (Figure 2) and litharge, which they used for marking skin and wood; the galena came mostly from Galena Point in Bathurst Inlet, but the source, or sources, of the litharge is not known.

BONE, ANTLER, HORN, IVORY

The caribou and the musk-ox supplied nearly all the bone that the Copper Eskimo required, although for shoeing the runners of their sleds they used rib bones from occasional whales that drifted up on their shores. There was hardly a bone in the two land animals that could not be turned to some purpose. Leg bones were in special demand for skin stretchers, for needle-cases, and for sheathing the wooden ends of harpoon shafts; another type of skin stretcher was fashioned from a caribou or musk-ox shoulder blade. The ribs served for handles of various kinds, for small toggles, pins, and bows for the drilling set. Other toggles were made from the breast or pelvic bones, and the astragalus provided a ready made mouthpiece for the drill.

The caribou alone provided antler, which was just as useful as bone, and interchangeable with that material for most purposes. On the other hand, ivory, which Eskimo elsewhere often substituted for bone and antler, was extremely rare, because neither the narwhal nor the walrus frequents the waters adjacent to the Copper Eskimo territory; consequently, the few ivory objects we saw among the natives almost certainly reached them by trade from the east or the west. Sheep likewise were absent, so that all the horn in use came from the musk-ox. This horn sometimes took the place of bone or antler, but it was especially prized for the manufacture of ladles, scoops, drinking horns, toggles for the sled, and hammers for pounding blubber.

Originally the Copper Eskimo used only four tools, all with copper blades, for shaping bone, antler, and horn, viz., the adze, the whittling knife, the grooving

[1] See p. 66.

[2] For the sources of this copper see Reports of the Canadian Arctic Expedition, vol. XII, pt. A, p. 32; vol. XI, pt. A, p. 33 et seq.

28: Jemeaa E-5 (1914-1916) 1946
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CHAPTER IV

TOOLS AND WEAPONS

WOMEN'S TOOLS

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Knives. All women's knives conformed to one general pattern (Figure 82). They had a more or less curvilinear blade, formerly of copper, now of iron, a handle of bone, musk-ox horn, or antler, and a tang-like connecting piece, nearly always of bone or antler and only rarely of copper, that was attached to the blade by copper rivets, and to the handle by being driven through a slot. The edge of the blade was almost flat, but it usually curved upward sharply at each end. One specimen had a copper tang of one piece with the blade, but in all other respects it conformed to the usual pattern. Modern knives have both blade and tang of iron, fastened together with iron rivets.

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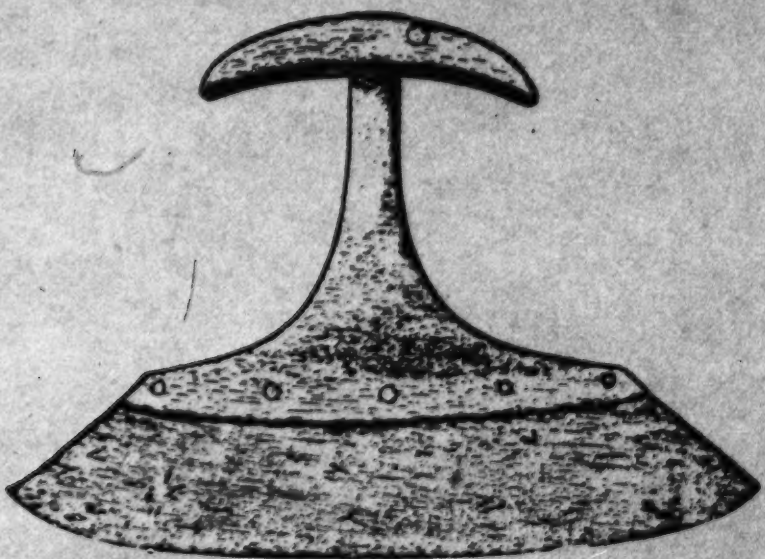

Figure 82. Typical woman's knife or ulu, with iron blade. IV.D.222. 1/3.

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From Victoria Island two specimens were obtained that differed from all others we saw in actual use. One of them is illustrated in Figure 83. It has no tang, the upper corner of the blade, which forms almost a right angle, being driven directly into the bone handle; furthermore, the edge of the blade has a very marked and regular curve. The other specimen (IV.D.1281) is similar, except that the handle is of wood. Both have large copper blades, and from their appearance are quite new. I feel certain that they were made for sale,

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The Copper Eskimo evidently experienced considerable difficulty in accurately splitting the thin base of the tang longitudinally for the insertion of the blade. Hence the tang was sometimes merely tapered flat to fit one face of the blade, through which it was riveted to an added piece of bone or antler laid on the other face. Figure 85c, which illustrates a specimen picked up on a grave, shows how this was done. When the tang itself was of copper, as in Figure 85e, it could be riveted directly to the blade without the necessity for support on the other face.

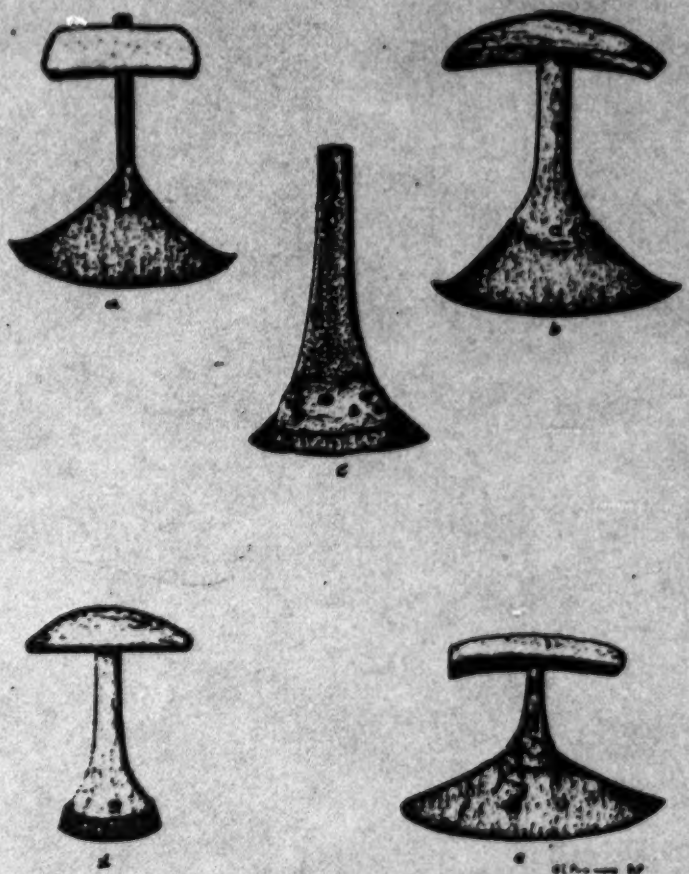

Figure 85. Women's knives, all half size (c) with iron blades, IV.D.515, 516, 572, IV.D.502; (e) with copper blade, IV.D.664. 2/3.

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Like several other Eskimo tools (e.g., skin scrapers), the women's knife was operated away from the body, thus enabling its user to see where she was cutting. The larger knives, which alone bore the name ulo, served for cutting

meat; the smaller ones, which had a special name *qimalik*, for cutting and trimming skins. In shape, they were practically identical, except that the smaller tool often had a more rounded edge than the tool used for cutting meat.

Women's knives, like men's, often had sharpeners attached to them by a cord of sinew. The earlier sharpener was the tooth of some animal, often the molar tooth of a musk-ox or bear; or a whetstone made from sandstone or other gritty rock; or a stick of copper mounted in a bone or antler handle (*Figure 86*). By 1914, nearly every native was using a fragment from a file, or the firing pin of an old rifle. Men generally used their sharpeners as a butcher uses his steel, but the women held the steel in the left hand and ran the edge of the blade to and fro along its surface.

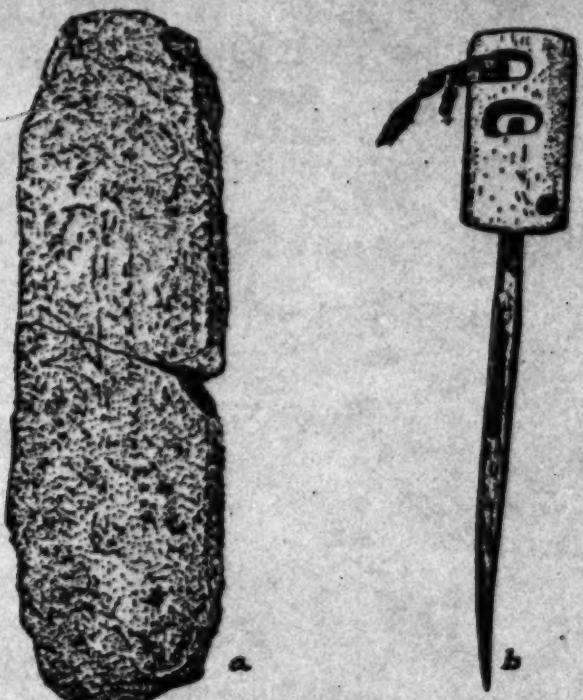

Figure 86. a: whetstone, IV.D.77; b: copper knife sharpener, IV.D.1281. 1/1.

Skin Scrapers. The scraper used to remove the fat and inner tissue of skins had a small copper blade with a curved edge mounted on a long handle of antler. Today, in this as in other implements, iron has taken the place of copper. The handle was nearly always forked, the branch-prong preventing the hand from sliding forward. Most specimens had also a notch for the forefinger cut in the under side. Figure 87c shows a typical specimen; its iron blade is fastened by two copper rivets to the handle, which has been flattened on its lower face. Its prototype with a copper blade is shown in Figure 88.

412 When a pronged antler was not available, the natives often made an
321 artificial prong. Thus Figure 87b illustrates a copper-bladed scraper with an
325 antler peg driven into a handle of the same material; a groove on the under side of the handle seems to indicate that it was used as the top piece of a bow-drill. The workmanship in the specimen illustrated in Figure 87a is much more
[414] careful. This scraper also has a copper blade attached to its antler handle by means of copper rivets, and a well-made knob on the under side of the handle for a finger rest. The upper surface, however, has been neatly trimmed and fitted with a small pronged piece of antler, held securely in position with three pegs of the same material.

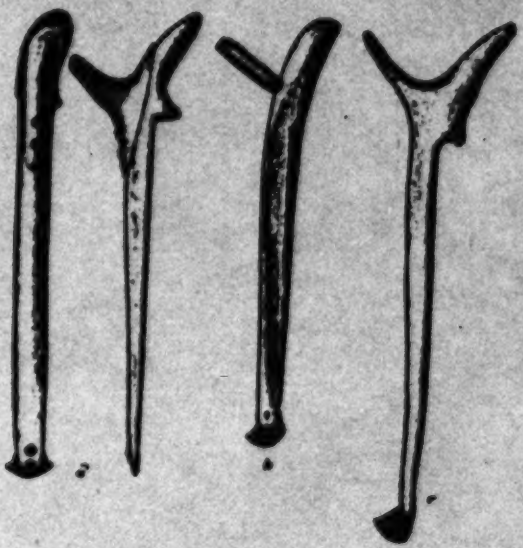

Figure 87. Skin scraper. a: IV.D.1619, and b: IV.D.1620, with copper blades; c: IV.D.448, with iron blade. Approx. 1/3.

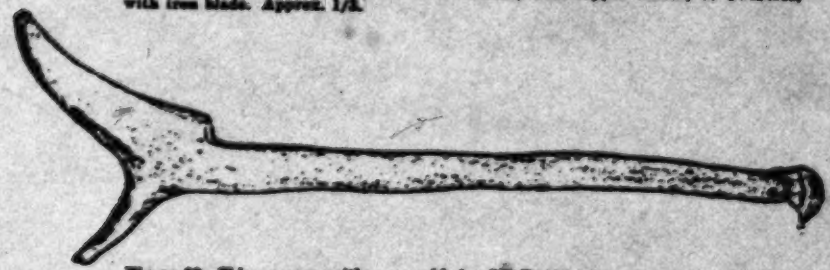

Figure 88. Skin scraper, with copper blade. IV.D.439. Approx. 1/2.

412 *Skin Stretchers.* There were two names for skin stretchers, *eqtoqsium* and
[192] *iku.gun.* The words are treated as synonymous in my notes, but it is more probable that each applied only to one of the two types that are described here. Some families possessed both kinds of stretchers, others only one.

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412 *Needles.* The Copper Eskimo seemed to have no recollection of bone sewing needles, but only of needles made from their native copper. They inserted them into a narrow strip of sealskin, or more rarely caribou skin, and drew them inside the needle-case for protection.

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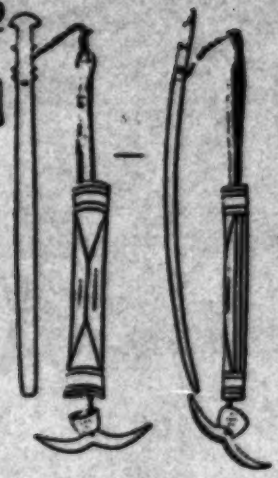

Figure 96. Needle-case and attachments, front and side view. IV.D.151. 1/2.

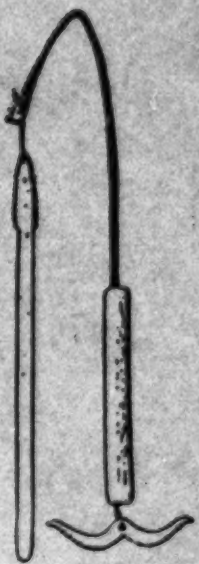

Figure 97. Needle-case and attachments. IV.D.226. 1/4.

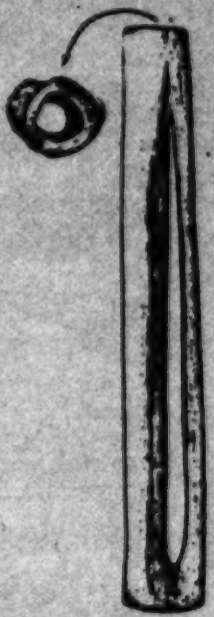

Figure 98. Hunter's needle-case, from bird bone. IV.D.267. 1/1.

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412 Copper needles had practically disappeared when we visited the country, although a considerable number were made for sale. The few genuine specimens that I have seen were nearly square in section, from 2½ to 4 inches long, and with eyes drilled from both sides (Figure 99).[1] Iron needles, hammered out in the same manner as the copper ones, were still in common use, but as most of them were too large to enter the needle-case, they were kept by their owners in a separate strip of sealskin or in a bunch of matted moss roots.

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[321] *Thimbles.* There were two kinds of thimbles. One was simply a cap of sealskin to cover the tip of the finger (*See* Figure 93a); when not in use it was often attached by a short thread to the sealskin that contained the needles. The other and more usual kind was made from a small bone in the foot of the caribou, or sometimes from the horn of the musk-ox. In nearly all cases the upper end was open like a ring, because only the side of the thimble was used, not the top. One variety was equally broad all around, and had tiny holes pitted over all or part of the outer surface; another variety resembled a signet ring, except that the broad surface was worn in front, not behind, and that face

[1] The copper needles collected in Coronation Gulf by Hanbury in 1903, now in the British Museum, are square, as are also some iron needles that were collected by Rae in Repulse Bay 60 years earlier.

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alone was pitted with holes. With constant usage the pits soon perforated right through the bone, when the thimble, ceasing to protect the finger, was thrown away. When steel needles were introduced the wear on the thimble was much greater than with the soft copper needles; consequently, there was quite a demand for metal thimbles, which had the further merit of chafing the finger less than the old bone ones. The metal thimble was then often kept in a tightly fitting bag of skin or cloth tied to the skin containing the needles; but the old bone thimble had a special toggle that is described below.

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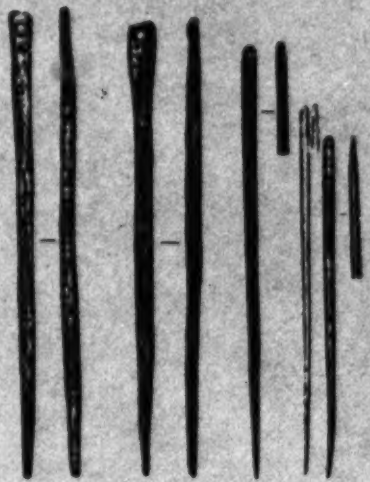

Figure 99. Copper needles. IV.D.229, 239. 1/1.

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A few thimbles are shown in Figures 100 and 101. Figure 100 illustrates the first stage in the manufacture of a bone thimble from a phalangeal bone of a caribou; Figure 101*c* gives the front view of what was perhaps the commonest variety, although this specimen is pitted on one face only; *b* is a side view of the signet-ring type; *a* is a thimble of musk-ox horn, closed at the top, possibly in imitation of European thimbles.

Figure 100. Unfinished thimble. IV.D.277. 1/1.

[192]

Thimble Holders. The thimble holder used with the open-topped bone thimbles was a small toggle made usually from the breast bone of a caribou (Figures 94-97). It always bore the same shape, which resembled somewhat the outstretched wings of a bird; but the length varied from 1½ to 3 inches. A small hole drilled through the middle enabled it to be tied with a sinew thread to the strip of sealskin containing the needles; the thimble merely slipped on over the toggle and dangled on the thread. The toggle provided also a very convenient handle for drawing out the needles, although its name, *tikivik* or "thimble-place", indicates that this was not its primary purpose.

412

Pendants to Needle-cases. A marrow spatula was generally attached to the sealskin at the end opposite to the thimble holder to help in drawing the needles inside the case, and to prevent the skin from pulling right out; but sometimes the skin was merely left larger at this end, or carried a button, shaped like the

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Figure 107. Man's knife, with copper blade. IV.D.1458. Approx. 1/4.

Knives. The oldest Copper Eskimo knives of which there is any record had large copper blades, lanceolate in form and sharp on both edges. Generally the blade had a tang, which was driven into an antler handle without being riveted, but occasionally there was no tang, the blade being set in a slot and secured with a single copper rivet. The handle was sometimes of two pieces, spliced together and riveted with copper or bone pegs, and the butt was a separate piece of bone, or sometimes musk-ox horn, pegged to the handle. A lashing of sealskin or willow root, which began through a hole in the butt and was wrapped around most of the handle, afforded a better grip than the smooth antler; its loose end passed through another hole and was tucked under one or more bights. A short loop of sealskin was often added in the side of the handle so that the knife could be hung on a button of the coat, or attached to a toggle on the bow-case (Figure 107).

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[284]

An excellent specimen of such a knife, collected by Captain Collinson at Cambridge Bay in 1852, is now in the Pitt-Rivers Museum at Oxford, England. Another specimen, with a rather shorter blade, collected by Lieutenant Singleton, of H.M.S. *Fox*, from an unknown locality, is in the Horniman Museum, Forest Hill, London. Others, collected by either Collinson or his colleague McClure on Victoria Island, are deposited in the British Museum. These are the oldest specimens known to me from the Copper Eskimo region. Hanbury collected several similar knives in 1902 between Ogden Bay and Coppermine River, some of which are also in the British Museum.

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Even in the nineteenth century a considerable amount of iron found its way into the Copper Eskimo country and was utilized for knives. Figure 108 shows a knife made from iron secured from McClure's ship, the *Investigator*, which was abandoned on Banks Island in 1851. The blades of these early iron knives correspond as nearly as possible to the copper ones; they were lanceolate, and hammered thin on both sides toward the edges. However, early in the twentieth century, European steel knives began to drift in from the south and southeast, and soon afterwards more knives and a quantity of iron entered the country from Great Bear Lake and from the west. The natives then removed the handles from the European knives and mounted them according to their own fashion; but often they left the shape of the blade intact. Accordingly, one found iron-bladed knives that had one or both edges sharp, or else half the back edge sharp and the other half blunt. These iron blades, also, were generally mounted in a slightly different manner from the old copper knives; their tangs were riveted between plates of iron that were riveted in turn to the antler handles.

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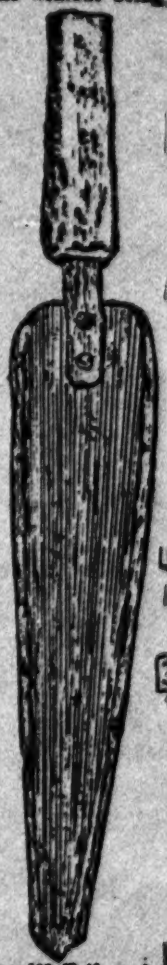

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Figure 108. Knife, made of iron from McClure's ship *Investigator*. IV.D.418. 1/2.

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By 1914 hardly a single copper-bladed knife remained in the country, except specimens that had been manufactured for sale to the first traders, like those shown in Figure 109. All the Copper Eskimo were using iron knives of various sizes and shapes, some with small blades and long handles, others with long blades and short handles, some single-edged and some two-edged (Figure 110). Specialization in types was beginning. For cutting snow, knives with long handles and long blades were accounted the most useful; for skinning caribou and seals, knives with shorter handles and blades of medium length. Some natives still preferred two-edged knives for skinning, others liked a sharp point, curved back, and a blunt back edge, as in the European hunting knife. Many men made still smaller knives for miscellaneous uses around the camp. A

[439]

certain number of small knives with copper blades may have been used even in the earliest days,[1] but all such specimens that I have seen, whether of iron or copper, date from the twentieth century, and the copper ones were made to sell to Europeans. Certainly the commonest type of knife in pre-European days, perhaps the only type outside the whittling knife, was the large lanceolate form commonly called the snow knife.

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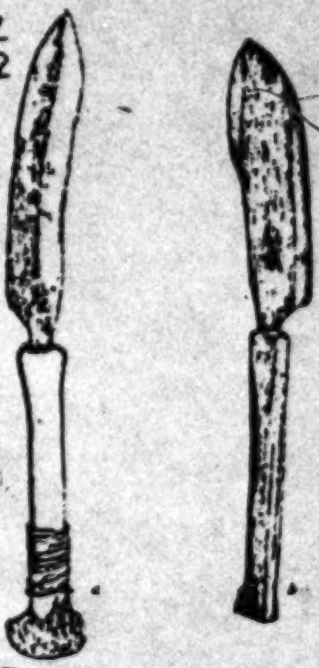

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Figure 109. Copper-bladed knives made for sale. a, IV.D.1381. 1/3; b, IV.D.382, approx. 1/2.

The older Thule inhabitants of the region, like those to the west and east, used a large, curved snow knife, nearly always made from whalebone. Figure 112 (IV.D.1660), however, shows a specimen obtained by Capt. J. Bernard in Coronation Gulf that is made from musk-ox horn. The local Eskimo knew its purpose, but had no recollection of ever using such a tool themselves.

Whittling Knives. Typical whittling knives (*havira.n*) with iron blades are shown in Figure 113. Copper was used for the blade in early times, but I was able to obtain only two examples, one of which is shown in Figure 114. Here, as often with the iron-bladed whittling knives, the handle is perforated half-way along its length for the attachment of the sharpener, which was usually of steel, but in this case a small copper pencil mounted in an antler handle.

Figure 113a shows a fairly old specimen with a tiny blade of what seems to be hoop iron; the handle, as usual, is of antler, and the rivet in this case of copper. In the specimen represented in Figure 113b the handle has been extended by splicing a short additional piece of antler. The same thing has occurred in the specimen shown in Figure 113d, but such extensions were less usual among the Copper Eskimo than among the Eskimo to the west.

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[1] In 1929 Mr. Lincoln Washburn obtained a handleless copper knife blade (Figure 111) that had been picked up on Victoria Island. One surface only was covered with a green patina; the other was still coppery, though dulled. Probably the specimen is not of great age.

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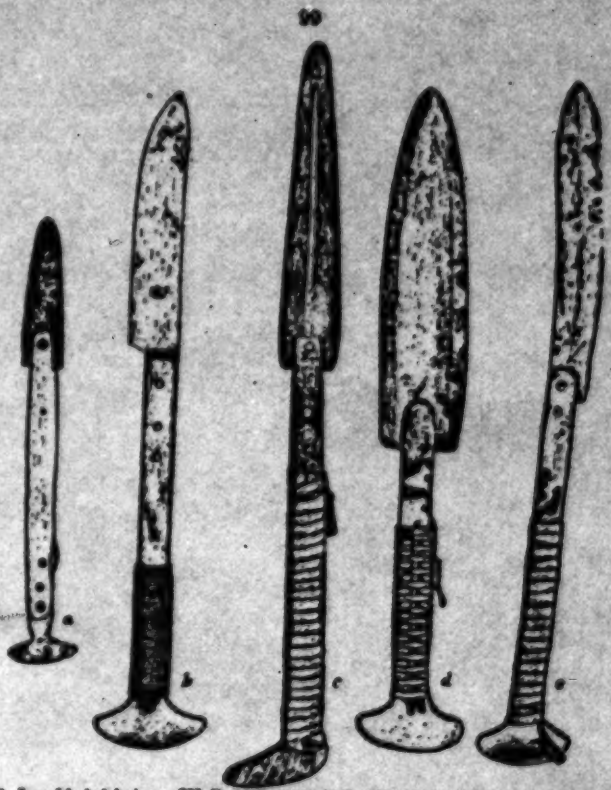

Figure 110. Iron-bladed knives. IV.D.1457, 1459, 1460, 176, 1849. All 1/4 except c which is 1/2.

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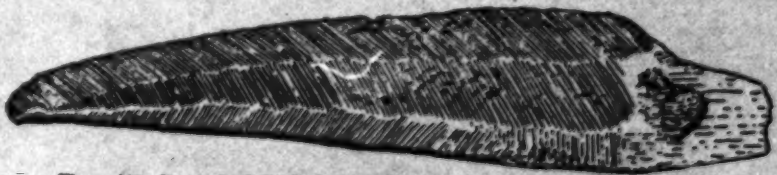

Figure 111. Copper knife-blade found on Victoria Island. IV.D.1817. Approx. 1/1.

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Figure 112. Knife blade of musk-ox horn. IV.D.1820. Approx. 1/1.

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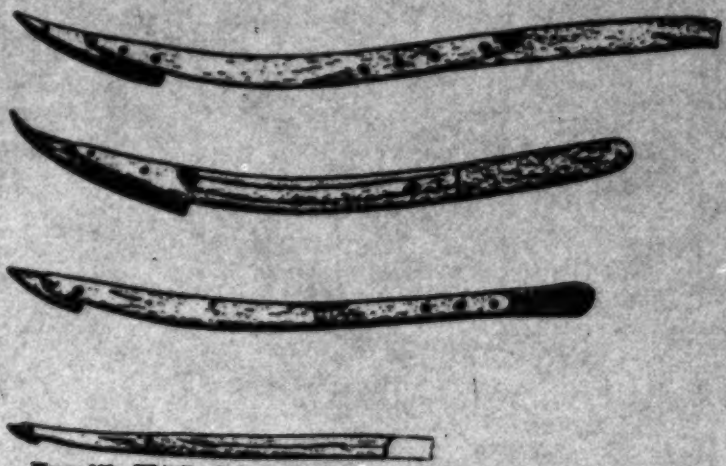

Figure 112. Whittling knives with iron blades. IV.D.1615, 172, 1[illegible], 1[illegible]. 1/4.

Figure 114. Old whittling knife with copper blade and copper sharpener. IV.D.1[illegible]. Approx. 1/2.

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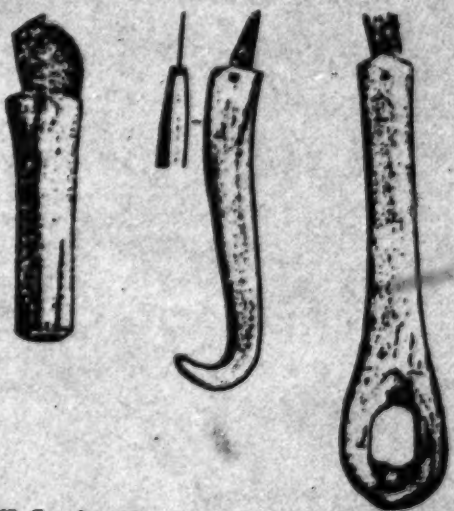

Figure 115. Grooving tools, with iron blades. IV.D.7[illegible], 1[illegible], 7[illegible]. 1/2.

The method of using the whittling knife in Coronation Gulf and westward differed from the Greenland method described by Porsild.[1] The Copper Eskimo held the knife low down with the hand directed inward, and the handle resting along the inner side of the forearm so that it fitted into the curve of the elbow. With the instrument thus pivoted on the elbow the forearm moved as one unit and the wrist remained perfectly still. Smaller whittling knives, even though their handles did not reach the elbow, were held in the same manner.

Grooving Tool. The Copper Eskimo had a tool for cutting grooves in bone, antler, and horn similar in shape to the tool used by other Eskimo tribes. The blade, which was nicked at the end or else bore a sharp, pointed projection, was mounted in an antler handle of no particular shape. Sometimes the handle was split for the insertion of the blade, sometimes the blade was simply driven in with a stone, and riveted or not according to the owner's fancy. Figure 115 shows three specimens of the tool, all from Coronation Gulf; but Figure 115c is really a combination tool, because its handle served also as an arrow straightener. All three specimens have iron blades, as indeed did every grooving tool I saw in the country. Whether copper or stone preceded iron in this case I did not discover.

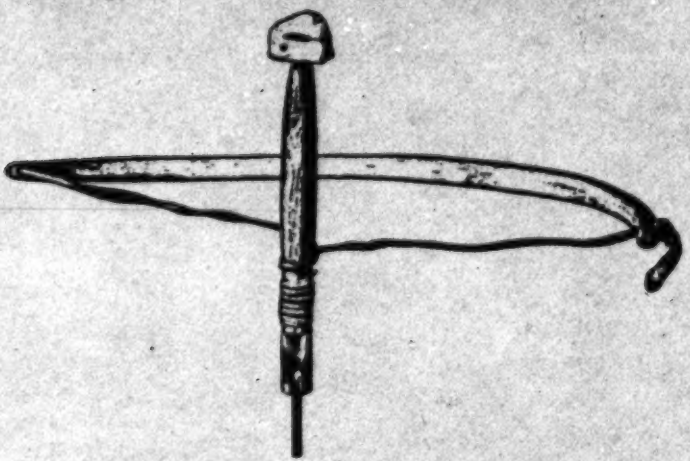

Figure 116. Drilling set. IV.D.706. 1/2.

Drilling Sets. The Copper Eskimo used the three-piece drilling set found among other Eskimo tribes (Figure 116). The bow was of bone, generally the rib of a musk-ox or caribou; a hole was drilled in each end for the attachment of the sealskin cord. The stem or spindle was nearly always of wood, though bone was used occasionally and ivory when it was procurable. To prevent the wood from splitting, a bead of bone, antler, or musk-ox horn was added to it, either as a cap or by splicing. All the drills I saw had points of iron, which had long been current in very small quantities; copper perhaps was used earlier, and stone, although the natives seemed to have no recollection of the stone drill points.

[1] Porsild, M. P.: Studies on the Material Culture of the Eskimos in West Greenland. Meddelelser om Grønland, vol. LI, p. 166.

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The most common mouthpiece was the astragalus of the caribou, though any piece of bone or antler, and even soapstone (Figure 117), might be shaped to serve the same purpose. When a man lacked a mouthpiece he often used the handle of his whittling knife or some other implement. The astragalus has a natural cavity of convenient size, but the rim is low on one side and the end of the spindle liable to slip out; consequently, a bone or metal peg was often inserted to raise the level of the rim in this place (Figure 118). Sometimes a small plate of copper or iron was driven into the bottom of the cavity through one side to give a hard, smooth base for the rotating spindle The latter feature may be of modern origin, but I am inclined to favour its antiquity on account of the number of specimens in which it is found, and the analogous stone sockets in other regions.

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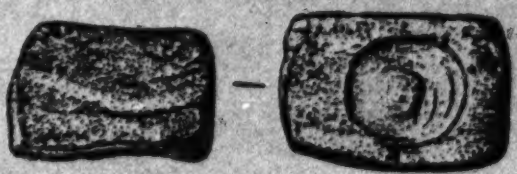

Figure 117. Mouthpiece for drill, of soapstone. IV.D.1678. 3/2.

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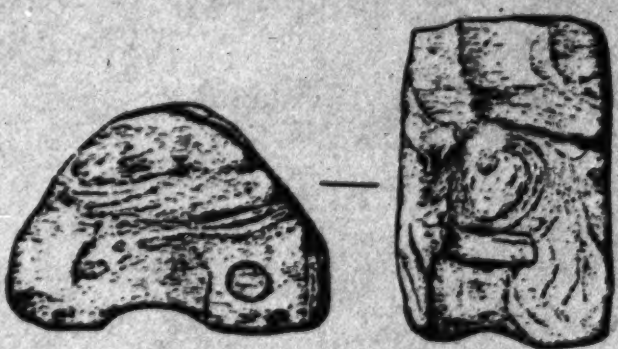

Figure 118. Mouthpiece for drill, made from caribou astragalus. IV.D.296. 3/2.

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Adzes. Hearne gives the following description of Copper Eskimo adzes. "Their hatchets are made of a thick lump of copper, about five or six inches long, and from one and a half to two inches square; they are bevelled away at one end like a mortice-chisel. This is lashed into the end of a piece of wood about twelve or fourteen inches long, in such a manner as to act like an adze: in general, they are applied to the wood like a chisel, and driven in with a heavy club, instead of a mallet. Neither the weight of the tool nor the sharpness of the metal will admit of their being handled either as adze or axe, with any degree of success".[1]

[114]

[1] Hearne's Journey from Prince of Wales's Fort in Hudson's Bay to the Northern Ocean, edited by J. B. Tyrrell: The Champlain Society, Toronto, 1911, p. [illegible]. Hearne, it should be noted, did not see these "adzes" in use. I suspect, indeed, that they were not adzes, but ice chisels.

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By the twentieth century almost every adze was equipped with a blade of iron; only a few retained blades of copper, which were mounted on antler, not wooden, handles, and applied in the ordinary way, not "like a chisel, driven in with a heavy club". Sometimes the blade was lashed directly to the handle, sometimes wedged into a separate head of bone, antler, or musk-ox horn. Examples of both methods are shown in Figure 119.

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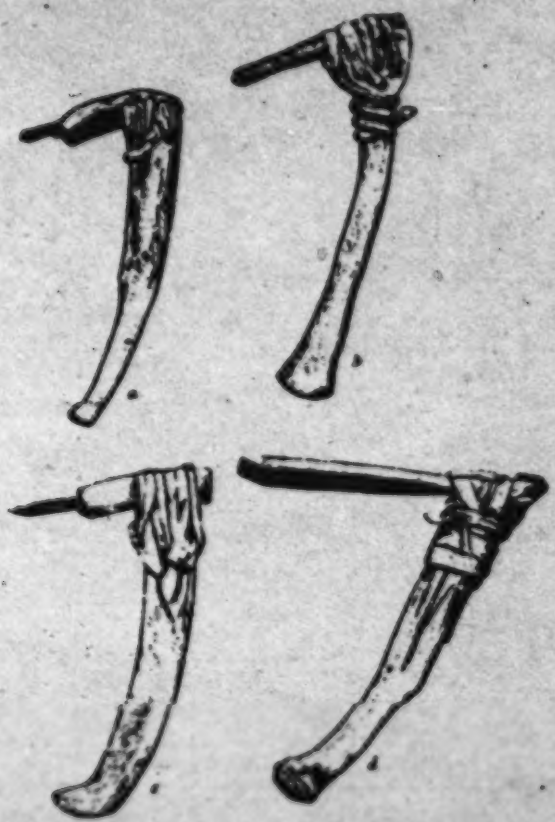

Figure 119. Adzes. b, with copper blade; a, c, d, with iron blades. IV.D.[illegible], [illegible], [illegible], [illegible]. 1/4.

Figure 119b is an old specimen from Coronation Gulf that has a copper blade lashed with a thong of sealskin directly to the antler handle, the top of which is hollowed to a V-shaped groove to prevent the blade from slipping over the side. The end of the blade was originally wrapped in sealskin to protect the lashing, but the sealskin has worn away on the sharp edges, though it still remains on top and bottom. The handle has four holes for the lashings.

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Figure 119*d* shows a similar specimen with a heavy steel chisel for a blade. Here, both the upper and lower surfaces of the lashing have been protected with sealskin, and the antler handle has only one large hole.

Figure 119*a* has a steel blade (part of a file) driven into a head of musk-ox horn; the end was wrapped in sealskin to wedge it securely in the socket. Five holes are drilled in the horn head, two in the handle to receive the lashing, which, as always, is of sealskin.

Figure 119*c*, which also has a steel blade, is mounted in a bone head without wedging. The head is not drilled for the lashing, but has a wide groove that answers the same purpose. The antler handle has only one large hole.

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Mattocks. Mattocks or picks of heavy bone or antler, mounted on handles like adzes, occur only as relics of the earlier whale-hunting population. Numerous specimens were noted in the ruins at Cape Kellett, on Banks Island, and one of whale rib, much weathered, was found without its handle near Forsyth Bay on Victoria Island (Figure 120). The local natives guessed its purpose correctly, though they had never seen one in use. In pattern it is identical with the mattocks I dug up at Barter Island, in northern Alaska, and with specimens from the "Thule" culture remains in Hudson Bay region.

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Figure 120. Old mattock of whale rib, found on Victoria Island. IV.D.287. 1/3.

Figure 121. Mattock or pick of antler, IV.D.288. 1/4.

The typical mattock of the Copper Eskimo was simply an unmounted caribou antler with sharpened point, butt crudely shaped to give a grip, and, rarely, a projecting foot as on the handle of the man's knife (Figure 131). Any large antler, curved or straight, served the purpose, and some specimens were

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with fine willow bark; many a careless fisherman, however, instead of splicing 321
it, simply fastened it down by two or three half hitches. The same method of [284]
fastening the line was adopted when the sinker had only one hole.

The bottom of the sinker was nearly always grooved to fit the end of the 227
hook; and often a small hole was drilled beside this groove to tie on the bait. 325
The hook was originally of copper, but by 1914 most of the natives were using an iron hook beaten out in the same manner as the old copper one (Figure 128). Generally, it was flattened at the upper end and riveted, but occasionally it passed through a hole in the sinker and was pegged to its back (Figure 129). Iron hooks were often driven directly into the bottom of the sinker without riveting. There was never any barb, and the hook seemed extraordinarily large for the size of the fish; but it was never intended to be swallowed, as the fish was jagged in the mouth as soon as it nibbled at the bait.

The bait was usually a strip of skin and flesh from the belly of the fish, or 226
sometimes its œsophagus. After being pushed onto the hook it was lashed to the 237
sinker with a thread of sinew. [284]

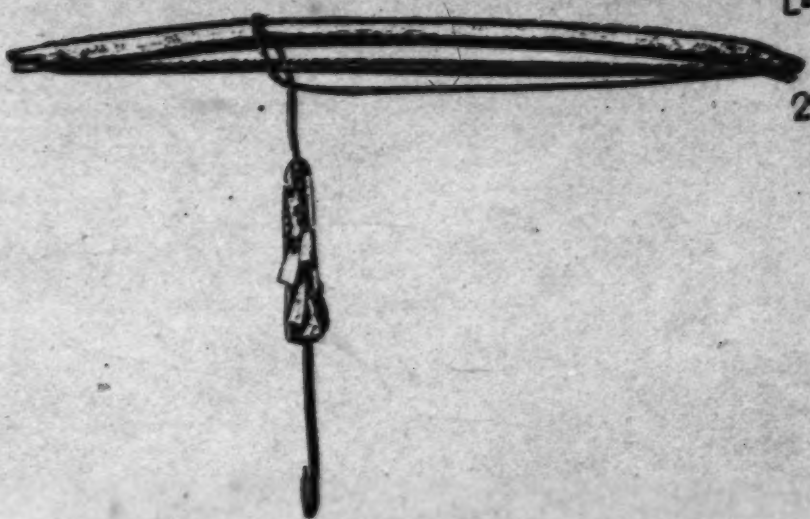

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Figure 128. Wood fishing rod and line. IV.D.167. 1/4.

The sinker for rod was made from the same materials as the sinker used 229
in lake fishing, but was generally much longer. The hook was also much 321
longer, varying from 5 to 9 inches; but both it and the line were attached in 237
the same manner. As no bait was used, there was no small hole at the bottom for its attachment; but three or four lures of bone or teeth, sometimes neatly shaped, were fastened at intervals to the under surface of the sinker by means of holes and sinew lashings (*See* Figure 128). Some common forms of these lures are shown in Figure 130. Often the natives dispensed with a hook altogether and used spears and a larger lure, made from a bear's tooth strung with smaller teeth or with gleaming fragments of bone that fluttered like flies in the water (Figure 131). Indeed, they caught more teased with their spears

[TEXT CONTINUED ON PAGE 110]

227
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Figure 127. Antler fishing rod, found in an old stone house on Victoria Island. IV. D. 1630. Approx. 1/2.

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Figure 128. Iron fish-hook set in bone. IV.D.1[illegible]. Slightly more than 1/1.

Figure 129. Copper fish-hook set in bone. IV.D.[illegible]. Slightly more than 1/1.

Figure 130. Bone lures used on tomcod fishing lines. IV.D.[illegible]. 1/1.

one needle, 8 inches long, the splinter was mounted in a wooden handle. The line was of sealskin, generally closed at the far end with a stick of bone, antler, or wood to prevent the fish from slipping off.

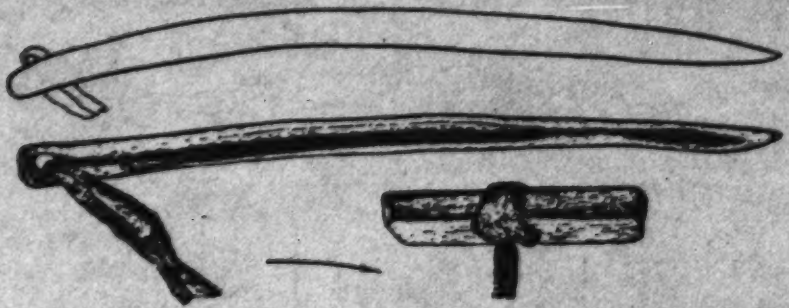

Figure 139. Bone needle for stringing fish. IV.D.661. Approx. 2/3.

Fish Bags. To pack their fish to camp the Eskimo used a bag of sealskin, commonly made by folding in the ends of a whole skin, doubling it over and tying a line to each end. The same bag, laced across, served as a dog-pack.

Fish Spears. Two varieties of fish spear were employed, the trident and the leister. The leister was preferred for spearing trout and salmon in lakes when they came to nibble at the lure, the trident for the migrating salmon that entered the weirs across streams; but generally a man used whichever weapon happened to be nearest at hand.

The shape of the leister is best seen from the illustration (Figure 134*a*). The handle was simply a long pole, split at the end to receive a barbed, occasionally barbless, point of antler, which was held in place with a lashing of sealskin, or more rarely of sinew. Two prongs facing each other, which sprang open on striking the fish, were invariably of copper or iron, copper, of course, being the original material; they were driven like nails into antler heads, which were bevelled off at the lower ends to fit corresponding ends on wooden extensions. Antler and wood were spliced with sealskin lashing, strengthened at times by bone or antler nails. The wooden extensions were then bevelled off in the same manner and lashed to the shaft, but not nailed, as low ridges at their tips prevented the lashings from slipping off. All these lashings quickly dried up from disuse, and the parts fell asunder except where they were held together by pegs. In a few leisters the side pieces were entirely of antler, not of antler and wood combined.

The trident (Figure 134*b*) resembled the leister, but had no prongs on the side pieces, which were made entirely of antler, pointed and barbed like the point in the middle. The number of barbs varied; in some cases they were directly opposite, in others staggered, both arrangements occurring at times on the same weapon.

Double-pointed spears were sometimes improvised for stabbing sculpins, or the small fish that hide under the stones on the margins of lakes. I have seen two sharpened pieces of bone, and even a European fork, lashed to the end of a walking-stick for this purpose. Naturally, they were dismantled again as soon as the need for them passed.

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The implement consisted of two long copper hooks driven through a piece 321
of antler at the end of a pole 4 or 5 yards in length (Figure 138). The antler, 325
bevelled off in the usual manner, was pegged to the shaft with bone or antler pins, and occasionally further secured by a sealskin lashing. The majority of

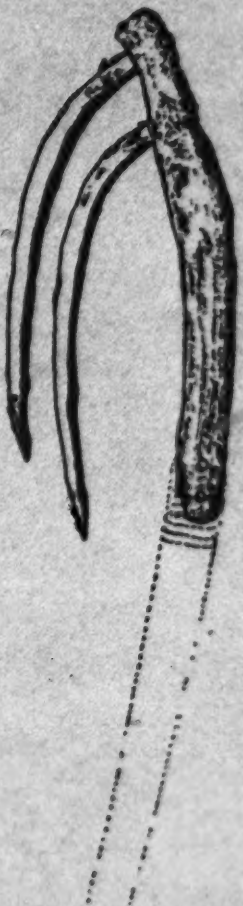

Figure 133. Fish rake with two copper prongs.
IV.D.431. 1/2.

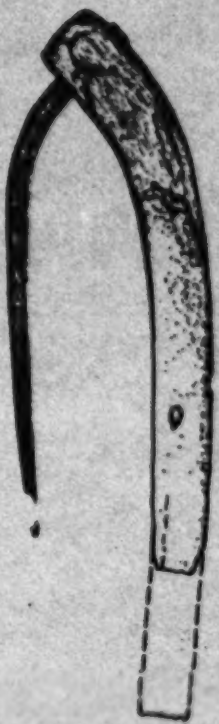

Figure 136. Fish rake with one copper prong.
IV.D.[illegible]. 1/2.

Figure 137. Ice chisel, of copper set in antler.
IV.D.[illegible]. 1/4.

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rakes had two hooks from 6 to 9 inches long, but a few had three hooks and others only one (Figure 136). Wedges of bone, antler, or copper were sometimes used to prevent the hook from pulling out.

Ice Chisels. Figure 137 shows a typical chisel used to drill through ice for 412
fishing, or to obtain drinking water. The blade is of copper, oblong in section, 321
and bevelled to an edge on one of its narrower faces. The fore-piece is of 325

412 antler, trimmed in front like a collar, and whittled down at an angle behind to
321 fit a long wooden handle. In this specimen the handle was attached by two bone pegs (which are still in position), supplemented by a sealskin lashing. In other specimens, especially the smaller ones, there was only one peg, and occasionally none at all, if the owner wished to use the same handle on his ice scoop or other implements. Apart from the number of pegs there was little or no variation in shape.

412 For several years after iron became readily available some of the Eskimo
325 still preferred their old copper ice chisels, because in shallow lakes the edge was often dulled through striking against the stones on the bottom, and copper was easier to hammer and grind into shape again than iron. The Copper Eskimo
[321] had no recollection of bone or ivory ice chisels, though their harpoon carried a pointed butt of bone or antler for planting the weapon upright in the snow.

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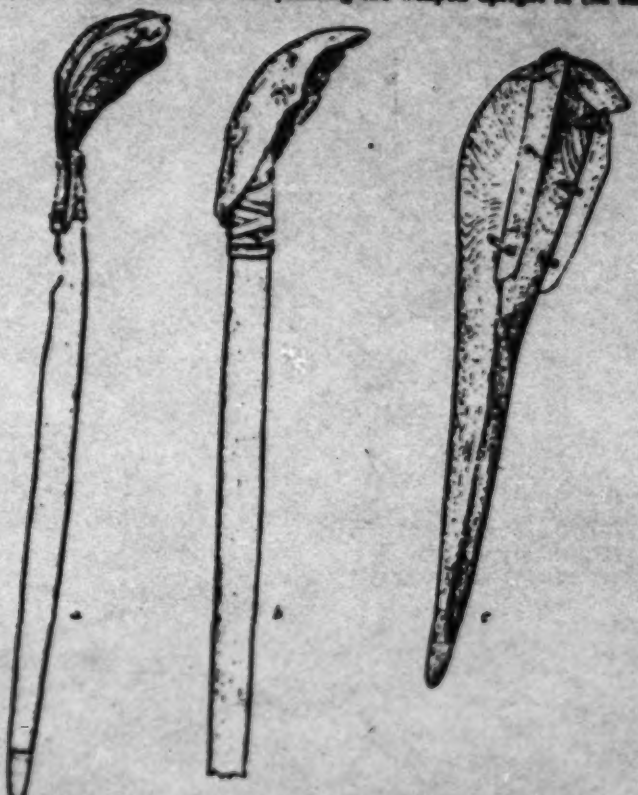

Figure 138. Ice scoops; a: of musk-ox horn; b: of bone; c: of wood edged with bone. IV.D.128, 179, 234. Approx. 3/10.

412 *Ice Scoops.* A common shape for the scoop used in clearing out the hole
321 made by the ice chisel is illustrated in Figure 138c, which shows a wooden ladle
322 with a "free-board" of bone attached by thongs of both sinew and sealskin
284 around the rim of the bowl. Some of the holes not filled with the lashing have been plugged with wood.

and a pointed bone or antler butt for planting the weapon upright in the snow. The butt was merely lashed to the end of the shaft with rawhide or sinew whipping; but the bone cap at the other end was riveted with bone or copper pins through two spurs that projected down the sides of the shaft, and the tapering end of the foreshaft was firmly wedged into its hollow by a packing of skin or fur. Through a hole drilled in the shaft just below the cap passed a sealskin thong that ran tautly one-third, one-half, or three-quarters the length of the shaft and was then knotted through another hole; it served, in conjunction with a piece of sinew attached to the hand line, to hold the harpoon head against the foreshaft. At the place where the sinew turked under it, some hunters lashed the thong tightly against the shaft with a whipping of rawhide, or held it down with a copper "staple".

All the Copper Eskimo harpoon heads I have seen had blades separate from the head, although specimens of the old Thule culture, in this area as elsewhere, sometimes have the blade and head in one piece. The older Copper Eskimo harpoon heads were made of bone or antler, and the bone or copper blade, shaped exactly like an arrow point, was invariably set horizontally in the same plane as the line holes, and secured with a single rivet of bone or copper. The butt of the head was cut aslant, giving a single sharp spur, and a circular hole was drilled for the insertion of the foreshaft. Three of these old harpoon heads are illustrated in Figure 140.

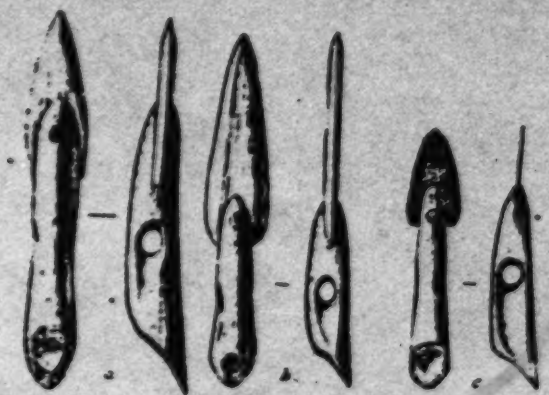

Figure 140. Old harpoon heads. *a*, *b*: bone blades; *c*: copper blade. IV.D.1638, 600, 1620. 1/2.

The introduction of iron did not change the type of the Copper Eskimo harpoon head, but only its material. At first only the blades were of iron; the heads proper continued to be made from bone and antler. By 1914, however, nearly all heads had come to be of iron, or occasionally of brass, and what seems to have been a new feature was introduced, a lengthening and bifurcation of the butt, resulting in two, stout, chisel-edged spurs, which were themselves often notched (Figure 141). This change we must probably ascribe to influences from Hudson Bay, where the spur of the ordinary sealing harpoon head has been bifurcated for several centuries. Among the Copper Eskimo every metal harpoon head that came under my notice possessed this feature, but not a single bone or antler one, except the specimen that will now be discussed.

Figure 142 shows a harpoon head without separate blade that was included in a large collection of specimens brought back by Mr. Stefansson and labelled Minto Inlet, Victoria Island. If it actually came from that district, it must

surely have been unearthed in some old ruin of pre-Copper Eskimo times, for it is identical with specimens that have been dug up in old dwellings in both Mackenzie Delta and northern Alaska. I rather suspect, however, that it came from one of these western areas, as did several other specimens in the collection that were certainly wrongly labelled.

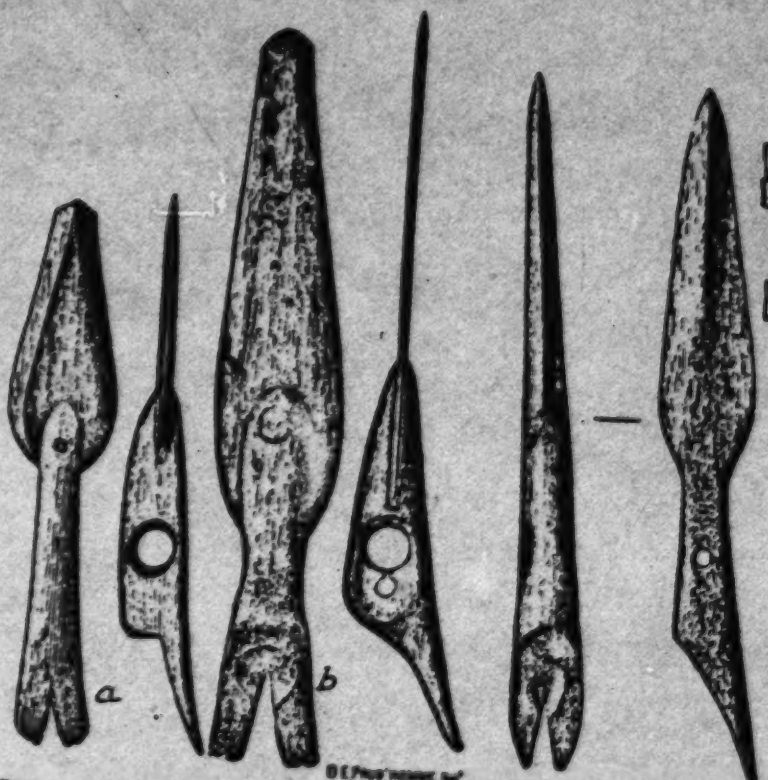

Figure 141. Modern harpoon heads with iron blades. a, IV.D.312, 1/1; b, IV.D.1034, 2/3.

Figure 142. Bone harpoon head. IV.D.1294. 1/1.

The line attached to the head of the harpoon averaged in length a little over 2 metres and was made of plaited sinew, of sealskin, or of both combined, some hunters preferring sinew for the grip, but, for the toggle end, a sealskin thong less liable to fray. All lines were double from the toggle nearly to the grip; and to one or both strands, about 3 feet from the toggle end, was tied a short piece of sinew, which tucked under the thong running along the side of the shaft and held the lower part of the line taut until the seal was struck, when it immediately slipped out of place.

When the line was of plaited sinew it was graded from an 8- or 16-ply weave down to a 4 or 6 ply. At times this was accomplished by twisting some of the strands together, a 12-ply line, for example, being combined in twos to make one of 6 ply, and this perhaps again to 4 ply; the two ends could be

scarfed and spliced together with three copper rivets (Figure 156). Both were deeply encrusted with lichens, and were evidently of considerable antiquity. Probably they were made by ancestors of the present-day Copper Eskimo. On the other hand, it is not at all impossible that they are arrow heads of the earlier "Thule"-culture inhabitants who have left other remains in the region. The use of copper rivets does not rule out this possibility, because copper-bladed women's knives with typical "Thule" handles have been recovered from an old stone house on Victoria Island and from a stone grave on the neighbouring Read Island, along with harpoon heads and other objects of typical Thule (North Alaskan) types. There are good grounds for believing, therefore, that the ancient Thule population itself used the local deposits of copper and passed on its knowledge to the ancestors of the present-day Copper Eskimo when the latter migrated into the area.[1]

In 1914 arrows with long antler points that fitted directly into the wooden shafts were fairly common; some had no barbs, others one or more along one side. Much more common, however, were arrows with separate blades of bone, copper, or iron that riveted into antler foreshafts, or were provided with long shanks that took the place of foreshafts. Points of bone were rare; about 65 per cent were of copper and the remainder of iron, hammered into the same shapes as the copper ones. These shapes, and also the methods of splicing the wooden shafts when made of two or more pieces, have been rather fully illustrated by Stefansson.[2] Individuals may have preferred one type of point to another for certain game, but so far as I could discover they used all types more or less indiscriminately.

The Copper Eskimo used the Mediterranean release, holding the bow almost horizontal. They generally feathered their arrows with goose, loon, eider duck, or snowy owl quills, but did not disdain quills from other birds. Normally, two feathers only were used on each arrow, but occasionally three, for no special reason that I could discover. The hunter cut off on his trimming board all the barbs along one side of the feather, smoothed the rough quill with his knife, grooved the arrow shaft with the special tool for that purpose (or, if he lacked this tool, split it slightly with his knife), and lashed the two ends of the feather in the grooves with caribou sinew. This was the usual way of feathering. Occasionally, however, he merely trimmed the barbs a little on both sides and fastened the feather flat against the shaft. There was also a third method, in which two half feathers, i.e., feathers from which the barbs on one side had been removed, were lashed around the end of the shaft spirally, end to end, and the barbs spread fanwise. I saw a man feather an arrow for his young stepson in this way and was told that it was a rare method, never employed on arrows intended for serious use.

Bow-case, Quiver, and Tool Bag

The bow-case (Figure 157), which was made of sealskin to keep out water, was shaped to the form of the weapon; one end was closed, the other left open for some distance down its curved edge to permit the insertion of the bow. To close the opening when the bow was in place there was a short cord of plaited sinew whose loose end was tucked under the lashing, leaving the tip protruding so that it could be unfastened at a single jerk. A quiver with or without a cap was sewn or buttoned to the straight edge of the case; and a tool bag was also sewn to the case in such a way that the quiver, when carried on the back, lay on top of it and prevented its contents from falling out. Often, too, there was a sheath

[TEXT CONTINUED ON PAGE 128]

[1] Mathiassen found a little copper in the old Thule site at Nagyuk, on the west shore of Hudson Bay (Reports of the Fifth Thule Expedition, vol. IV, pt. 1, pp. 14, 16 (Copenhagen, 1927)); and Graham Hawley discovered a small copper knife on a Dorset culture site near Igloolik, some 200 miles further north. So far as we know today, this copper could have come only from the Coppermine Gulf region.

[2] Stefansson, Ve Anth. Papers, Am. Mus. Nat. Hist., vol. XIV, figs. 32-33 (1919).

29: Jenness E-5 (1914-1916) 1959
ND8 Copper Eskimo ND8

bullet with his ramrod; when that failed, he borrowed another rifle and fired a blank cartridge down the muzzle, while a crowd of natives stood around him to see the result. Fortunately there were no casualties; the chamber merely swelled to the size of a hen's egg and cracked. Then the man and his companions, thinking that the tempered steel might be malleable like the native copper they used for their tools, attempted to weld the crack by pounding on it with a heavy stone.

Hitherto I had escaped all friction with the natives; now came my first trouble. I was sitting in their largest hut, bartering knives, files, and cooking-pots for the usual museum specimens. A native offered to exchange a small horn drinking ladle for a twelve-inch butcher's knife, and I refused, since the knife was worth a dozen such ladles. He knew that all my companions were fifty miles away, and determined to take by force what he was unable to obtain through barter. He seized the knife, and I seized his wrist. In strength we were equally matched; he could not release his wrist, nor could I force the knife out of his fingers. The hut was crowded to suffocation with Eskimos, who made no attempt to take part in the struggle, but waited to see the issue. They had no chief, no one with authority to settle the case at strife; if my adversary won, the more lawless would band together and strip me of everything I had. The

29: Jenness E-5 (1914-1916) 1959
ND8 Copper Eskimo ND8

224 they were always well pleased when I joined the hunt-
411 ing excursions.
123

221 Yet my "parents" were not satisfied. They wished
224 me to become expert in fishing also. The caribou
226 migration was almost ended; soon the herds would scatter far and wide, and fish alone be our mainstay
237 until midsummer. Icehouse made a bag of sealskin
123 to hold all the trout and salmon I would surely catch, and Ikpuck overhauled my fishing-line, fitting it with a barbless hook and bone sinker like his own. Then he wound it over a short stick notched at both ends, gathered up his own equipment, and invited me to my first lesson.

226 I have a vivid recollection of that lesson. We went
123 out on the lake before noon, and with a chisel of native
[325] copper lashed to the end of a stout pole Ikpuck proceeded to dig a hole through the six-foot covering of ice. In twenty minutes he reached the water, making a hole fifteen inches in diameter at the top, four inches at the bottom. He then lowered his line until it touched bottom, rewound it about a foot, and began a rhythmical jigging.

"Take my chisel and make another hole for yourself," he said. Nothing seemed easier. I moved about twenty paces away and dug steadily for half an hour, but always there was more ice at the bottom of the hole. Ikpuck, who already had two trout on the ice beside him, looked over and laughed. "Come and